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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,836	10/20/2003	Toyotaro Tokimoto	209945-999013	5413

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/690,836	TOKIMOTO ET AL.	
	Examiner	Art Unit	
	Kimnhung Nguyen	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27,28,31-36 and 41 is/are rejected.
- 7) ☒ Claim(s) 29,30 and 37-40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/039,104.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/11/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application has been examined. The claims 27-41 are pending. The examination results are as following.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 35-36 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Judd (US 4,779,135, cited by Applicant).

As to claim 35, Judd discloses in fig. 1, a device comprising one or more pixels (see each small box prerepresents one pixel (see col. 3, lines 23-25) for displaying a portion of a digital image, the device comprising:

a data selector operable to select a portion of the digital image (see col.3, lines 60-64);

a display circuit (multi-image display system 10 are controlled by the processor 22, see col. 4, lines 56-57) operable to operate the one or more pixels based on the selected

portion of the digital image, wherein the display circuit comprises: (i) a memory (memory boards see fig. 3, col. 5, lines 60-61) operable to store the selected portion of the digital image, (ii) a controller operable to select at least one dot from the stored portion of the digital image according to a pattern, and (iii) one or more drivers for operating the pixels based on the selected on or more dots (see col. 5, lines 39-65).

Art Unit: 2629

As to claim 36, Judd discloses further, wherein the pattern specifies one or more of: (i) the probability of selecting each dot in the assigned group, and (ii) the order in which dots in the assigned group are selected for display (see col. 7, lines 27-42).

As to claim 41, Judd discloses in fig. 1, a device comprising one or more pixels for displaying a portion of a digital image, the device comprising:

means for selecting a portion of the digital image (see col.3, lines 60-64);

means for storing the selected portion of the digital image (see col.5, lines 60-61);

means for selecting at least one dot from the stored portion of the digital image according to a pattern (see col.5, lines 39-65); and

means for operating a pixel based on the selected at least one dot (see col. 5, lines 39-65).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 27-28 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Judd (US 4,779,135).

As to claim 27, Judd discloses in fig. 1, a method of displaying a digital image on a device comprising one or more pixels, the method comprising: dividing the digital image into groups of dots; assigning a group of dots to a corresponding pixel; and for the assigned group,

Art Unit: 2629

(1) selecting at least a first dot from the assigned group according to a pattern (see each small box prerepresents one pixel, see col. 3, lines 23-25),

(2) operating the corresponding pixel based on the selected at least the first dot at a first time instance (see col. 5, lines 39-65)

(3) selecting at least a second dot (see each small box prerepresents one pixel, means the second small box is second dot, see col. 3, lines 23-25) see col. 5, lines 39-65).

(4) operating the corresponding pixel based on the selected at least the second dot at the second time instance (see fig. 1).

However, Judd does not disclose the second dot different from the first dot.

It would have been obvious for Judd's system to have the second dot different from the first dot because the array pixels usually set in matrix with $M \times N$ pixels therefore the first pixel in M different with pixel in N .

As to claim 28, Judd discloses further, wherein the pattern specifies one or more of: (i) a probability of selecting each dot in the assigned group, (see fig. 1, see col. 3, lines 60-67).

As to claim 31, Judd discloses further, wherein each group of dot has at most twenty five pixels (fig. 1).

As to claim 32, Judd discloses further, the assigned group performing mathematical calculations on the selected dots (see calculate a weighted average value which determines the out put pixel, see col. 3, lines 57-64).

As to claim 33, Judd discloses further, wherein the mathematical calculations comprise averaging (see col. 3, lines 57-64).

As to claim 34, Judd discloses further, wherein the first dot belongs to only an inherent one group.

Allowable Subject Matter

5. Claims 29-30, and 37-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: None of the cited art teaches or suggests that a method of displaying a digital image on a device comprises one or more pixels, wherein the pattern specifies that some dots in assigned group are selected with higher frequency than other dots in the assigned group.

Response To Arguments

7. Applicant's arguments with respect to claims 27-41 filed on 5/11/06 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2629

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen
August 6, 2006



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